SECTION BCS

BODY CONTROL SYSTEM

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PRECAUTIONS

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Precautions for Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

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The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

Wiring Diagrams and Trouble Diagnosis

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When reading wiring diagrams, refer to the following:

- GI-14, "How to Read Wiring Diagrams" in GI section
- PG-2, "POWER SUPPLY ROUTING" for power distribution circuit in PG section

When performing trouble diagnosis, refer to the following:

- GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES" in GI section
- GI-26, "How to Perform Efficient Diagnosis for an Electrical Incident" in GI section

SMART ENTRANCE CONTROL UNIT

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Description

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OUTLINE

The smart entrance control unit totally controls the following body electrical system operations.

System	Reference
Power door lock	BL-23, "POWER DOOR LOCK SYSTEM"
Multi-remote control system	BL-45, "MULTI-REMOTE CONTROL SYSTEM"
Warning chime	DI-42, "WARNING CHIME"
Rear window defogger and door mirror defogger	GW-17, "REAR WINDOW DEFOGGER"
Theft warning system	BL-76, "VEHICLE SECURITY (THEFT WARNING) SYSTEM"
Interior room lamp	LT-43, "INTERIOR ROOM LAMP"

INPUT/OUTPUT

System	Input	Output
Power door lock	Door lock/unlock switch Door switches Door key cylinder switches Key switch (Insert)	Door lock actuator
Multi-remote control	Key switch (Insert) Ignition switch (ACC) Door switches Door lock/unlock switch Remote controller signal	Horn relay Interior room lamp Turn signal lamps Door lock actuators
Warning chime	Key switch (Insert) Ignition switch (ON) Lighting switch (1st, 2nd) Front door switch (driver side) Seat belt buckle switch (driver side)	Warning chime (located in smart entrance control unit)
Rear window defogger and door mirror defogger	Ignition switch (ON) Rear window defogger switch	Rear window defogger relay
Theft warning	Ignition switch (ACC, ON) Door switches Hood switch Door key cylinder switches (lock/unlock) Door lock/unlock switch	Turn signal lamps Horn relay Security indicator lamp
Interior room lamp	Door switches Door lock/unlock switch Ignition switch (ON) Key switch (Insert) Door key cylinder switches (lock/unlock)	Interior room lamp Luggage room lamp

Schematic

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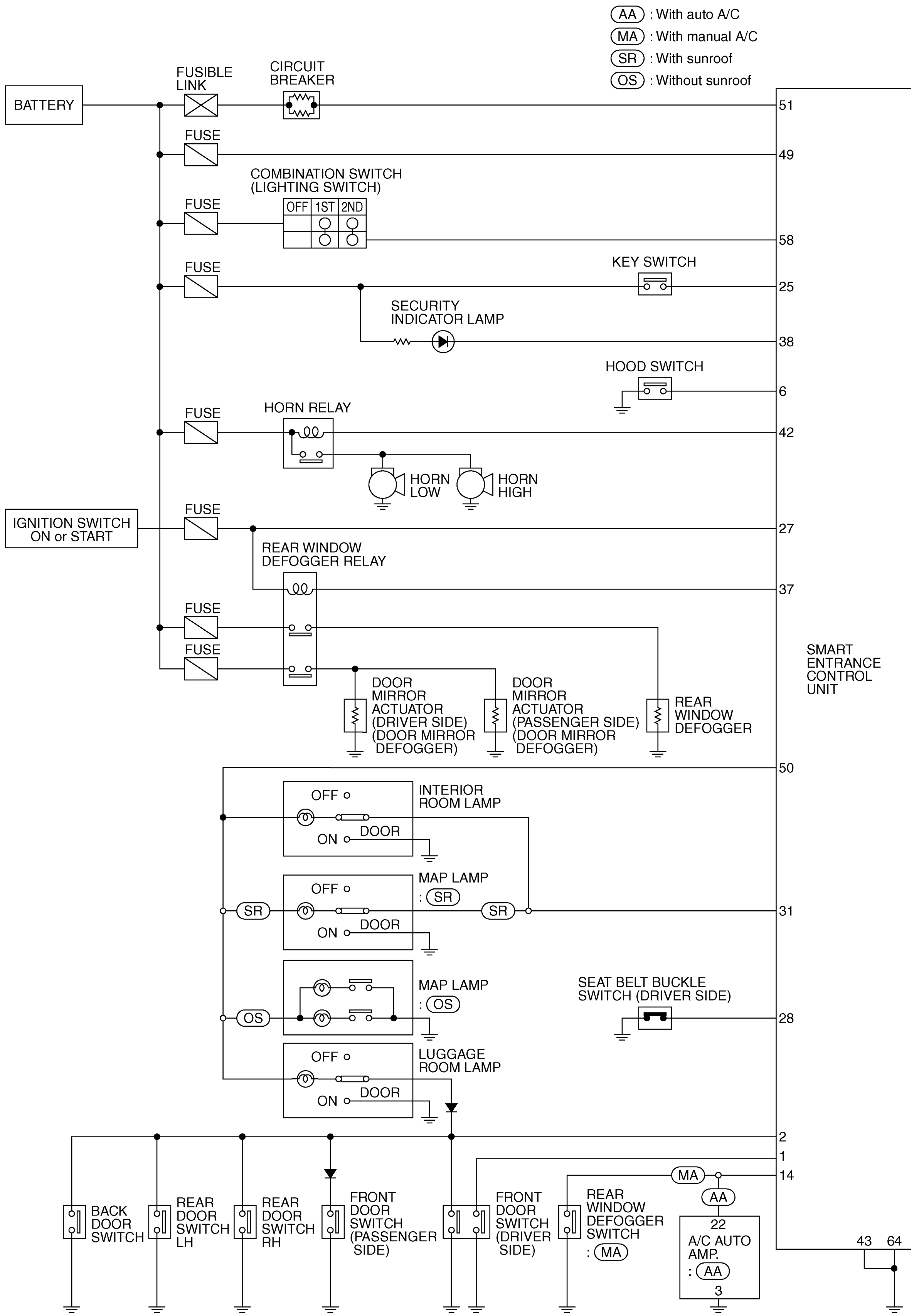

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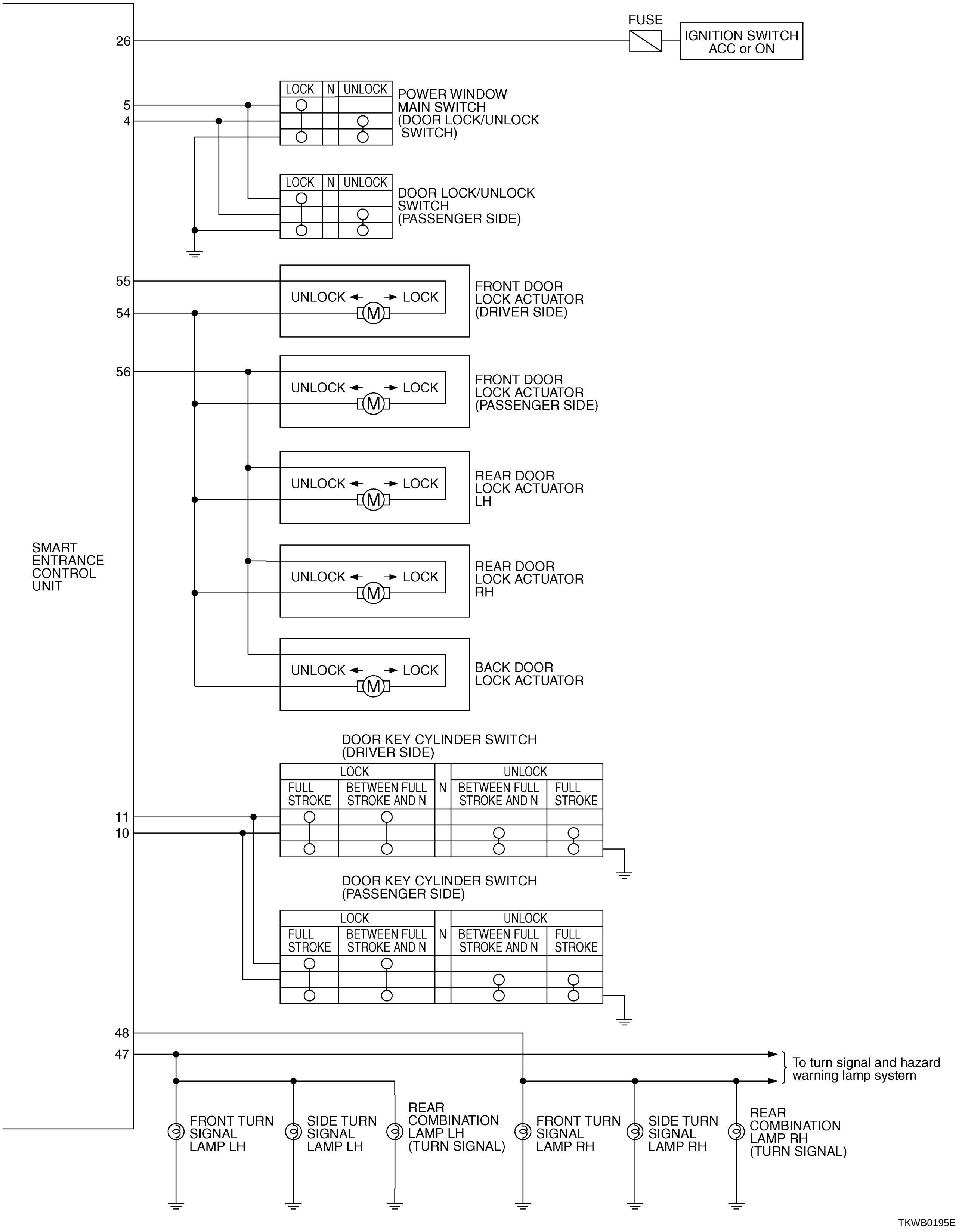
26
FUSE
IGNITION SWITCH ACC or ON
LOCK N UNLOCK
5
4
POWER WINDOW MAIN SWITCH (DOOR LOCK/UNLOCK SWITCH)
DOOR LOCK/UNLOCK SWITCH (PASSENGER SIDE)
55
54
56
UNLOCK LOCK
M
FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
REAR DOOR LOCK ACTUATOR LH
REAR DOOR LOCK ACTUATOR RH
BACK DOOR LOCK ACTUATOR
SMART ENTRANCE CONTROL UNIT
DOOR KEY CYLINDER SWITCH (DRIVER SIDE)
LOCK UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
11
10
DOOR KEY CYLINDER SWITCH (PASSENGER SIDE)
48
47
To turn signal and hazard warning lamp system
FRONT TURN SIGNAL LAMP LH
SIDE TURN SIGNAL LAMP LH
REAR COMBINATION LAMP LH (TURN SIGNAL)
FRONT TURN SIGNAL LAMP RH
SIDE TURN SIGNAL LAMP RH
REAR COMBINATION LAMP RH (TURN SIGNAL)
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Terminals and Reference Value for Smart Entrance Control Unit

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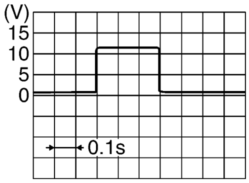
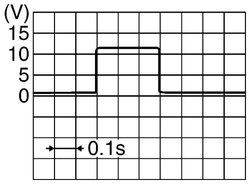
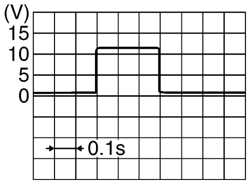
Terminal No.	Wire color	Item	Condition			Reference values (Approximate values)
			Ignition switch	Operation		
1	SB	Front door switch (Driver side)	OFF	Front door (driver side)	Closed	12 V
					Open	0 V
2	R/W	All door switches	OFF	Any door	Closed	5 V
					Open	0 V
4	PU	Door lock/unlock switch	OFF	Door lock/unlock switch	Neutral	5 V
					Unlocks	0 V
5	GY				Neutral	5 V
					Locks	0 V
6	W/L	Hood switch	OFF	Hood	Open	0 V
					Closed	12 V
10	GY/R	Door key cylinder unlock switch	OFF	Door key cylinder lock switch	Neutral	5 V
					Unlocked	0 V
11	Y/PU		OFF		Neutral	5 V
					Locked	0 V
14	LG/B	Rear window defogger switch	ON	Rear window defogger switch	Not pushed	5 V
					Pushed	0 V
25	W/L	Key switch (Insert)	OFF	Key inserted		12 V
				Key removed from IGN key cylinder		0 V
26	GY/L	Ignition switch (ACC)	ACC	—		Battery voltage
27	G	Ignition switch (ON)	ON	—		Battery voltage
28	BR/W	Seat belt buckle switch	ON	Seat belt buckle	Unfastened	0 V
					Fastened	12 V
31	R/Y	Interior room lamp	OFF	When interior lamp is operated using remote controller (With lamp switch in “DOOR” position).	Unlock	0 V
					Lock	12 V
37	G/W	Rear window defogger relay	ON	Rear window defogger	OFF	12 V
					ON	0 V
38	OR	Security indicator lamp	OFF	Security indicator lamp goes off.		12 V
				Security indicator lamp illuminates.		0 V
42	W/G	Horn relay	OFF	Panic alarm is not operated.		12 V
				When panic alarm is operated using remote controller.		0 V
43	B	Ground	ON	—		0 V
47	G/B	Turn signal lamp LH	OFF	When door lock or unlock is operated using remote controller.		12 V
				Door lock or unlock is not operated using remote controller.		0 V
48	G/Y	Turn signal lamp RH	OFF	When door lock or unlock is operated using remote controller.		12 V
				Door lock or unlock is not operated using remote controller.		0 V
49	L/R	Power source (Fuse)	OFF	—		Battery voltage

Terminal No.	Wire color	Item	Condition			Reference values (Approximate values)
			Ignition switch	Operation		
50	R	Battery saver (Interior room lamp)	OFF	Battery saver operates		12 V
				Does not battery saver operate (Interior room lamp is OFF).		0 V
51	W	Power source (C/B)	OFF	—		12 V
54	R/B	Door lock actuator	OFF	Door lock/unlock switch	Free	0 V
					Lock	 SKIA9232E
55	G/Y				Free	0 V
					Unlock	 SKIA9232E
56	G/R	Passenger and rear door lock actuators	OFF	Door lock/unlock switch	Free	0 V
					Unlock	 SKIA9232E
58	R/L	Lighting switch	OFF	Lighting switch is 1ST or 2ND positions		12 V
				Lighting switch is OFF position		0 V
64	B	Ground	ON	—		0 V

Removal and Installation of Smart Entrance Control Unit

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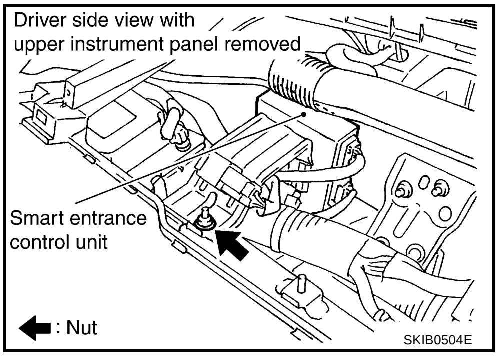
REMOVAL

1. Disconnect battery cable at negative terminal.
2. Remove cluster lid “A”. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
3. Remove front speaker grille. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
4. Remove driver box. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
5. Remove bracket mounting nut (1).
6. Disconnect smart entrance control unit connector.
7. Remove smart entrance control unit.



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INSTALLATION

Installation is the reverse order of removal.